

Notice of Allowability

Application No.

09/942,995

Examiner

Dillon J. Murphy

Applicant(s)

TOKUNAGA ET AL.

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed April 11, 2007.
2. ☒ The allowed claim(s) is/are 1-20,22,23 and 26, (renumbered as claims 1-23).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 6/8/2007
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Scott Tulino on June 1, 2007.

The application has been amended as follows:

Replace claim 1 with claim 1 as written below:

An invisible information recording method comprising:

extracting a location of at least one blank area of a page image of a sheet of paper, wherein said location of said at least one blank area is different from a location of an image, which is visible to the naked eye, of said page image of said sheet of paper; and

recording a digital image on said location of said at least one blank area on said sheet of paper;

wherein said digital image comprises information in the form of pixels so sized as to be invisible to a naked eye and at a print density invisible to the naked eye,

wherein said extracting comprises extracting a plurality of locations of blank areas from said page image of said sheet of paper,

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wherein said plurality of locations of blank areas extracted from said page image of said sheet of paper include at least one blank area which is located in a position on said page image of said sheet of paper other than a location of a margin of said sheet of paper,

wherein no part of said digital image is recorded in said location of said image of said page image of the sheet of paper, and

wherein a print density invisible to the naked eye is such that the pixels each so sized as to be invisible to the naked eye are coarsely distributed and an image density is 0.1 or less.

Replace claim 15 with claim 15 as written below:

A printing system including an archiving printer which prints a document upon receipt of a request of printing the document, and at the same time stores the document as document data into an archive, and upon receipt of a request of reprinting the document stored, reprints the document by using the document data stored in the archive, the archiving printer comprising:

a blank area extracting section that extracts locations of a plurality of blank areas in a page image of a document, wherein' said locations of each of said plurality of blank areas is different from a location of an image, which is visible to the naked eye, in said page image of said document; and

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a recording section for recording archive management information on storage locations of documents in the archiving printer in to at least one of said plurality of blank areas of said document when the document is printed, in a state that the information is invisible to the human eye or needs a careful watching to see the information;

a reading section for reading out the information being recorded in the printed document in a state that the information is invisible to the human eye or needs a careful watching to see the information, by reproducing the document printed by the archiving printer by means of reproducing means; and

a knowing section for knowing the archive management information of the printed document from the read out information,

wherein said plurality of locations of blank areas extracted from said page image of said sheet of paper include at least one blank area which is located in a position on said page image of said sheet of paper other than a location of a margin of said sheet of paper,

wherein no part of said digital image is recorded in said location of said image of said page image of the sheet of paper, and

wherein the state of the information which is invisible to the human eye is such that pixels of the information each so sized as to be invisible to the human eye are coarsely distributed and an image density is 0.1 or less.

Cancel claim 24.

Cancel claim 25.

DETAILED ACTION

- This action is responsive to the amendment filed April 11, 2007.
- Claims 1-20, 22, 23 and 26 are pending.

Claim Rejections - 35 USC § 103

The 35 U.S.C. 103 rejections of claims 1-20 and 22 have been withdrawn.

Allowable Subject Matter

Claims 1-20, 22, 23 and 26 are allowed.

Regarding claims 8-12 and 23: Claims 8-12 were objected to in the Office Action mailed December 11, 2006. Claim 23 was allowed in the Office Action mailed December 11, 2006.

Regarding claims 1-7, 13-20, 22 and 26: Independent claims 1 and 15 comprise similar features found in claim 8. Therefore, independent claims 1 and 15 are allowable over the prior art for the same reasons. Claims 2-7, 13, 14, 16-20, 22 and 26 are inherently allowable for depending on an allowable base claim.

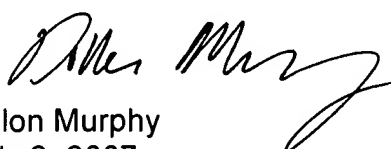
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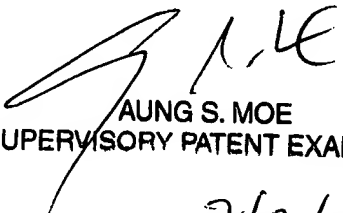
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dillon J. Murphy whose telephone number is (571) 272-5945. The examiner can normally be reached on M-F, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571) 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Dillon Murphy
July 2, 2007


AUNG S. MOE
SUPERVISORY PATENT EXAMINER

7/2/07